UNSW AUSTRALIA
FACULTY OF SCIENCE
SCHOOL OF AVIATION

GRADUATE DIPLOMA OF ADVANCED FLYING (Program 5545)

Full details are available on the UNSW on-line handbook, which is the authority. Details are re-printed here. This program is presently only available for local students.

PROPOSED HANDBOOK ENTRY
Advanced Flying - 5545
Program Summary Faculty: Faculty of Science
Contact: http://www.aviation.unsw.edu.au
Campus: Sydney Career: Postgraduate
Typical Duration: 1 Year
Typical UOC Per Semester: 24
Min UOC Per Semester: 6
Max UOC Per Semester: 27
Min UOC For Award: 48
Award(s):
Graduate Diploma (Specialisation)

Program Description
The Graduate Diploma in Advanced Flying is a program designed to meet the needs of graduates with an ambition toward a career as an airline pilot. This program provides the ground and simulator training which is required for pilots by airlines prior to type endorsement. The core training includes the concepts and practices of Multi-Crew-Coordination, and training in Aeroplane Systems required for a pilot to operate a transport category aeroplane as a pilot. In addition to specific training as above, award of the Diploma will require satisfactory completion of four related aviation postgraduate theory courses. The student also needs to understand core aspects of the theory of aviation safety, and this will be acquired through studying existing additional Aviation postgraduate courses. This program aligns with the UNSW Postgraduate Coursework policy and AQF level 8.

Program Objectives and Graduate Attributes
• Graduates will be equipped with a breadth and depth of generic, disciplinary and specific knowledge and skills which can be applied to a range of complex contexts associated with operating a transport category aeroplane safely as a pilot,
• Graduates will have developed an understanding of enquiry-based learning and demonstrate analytical skills,
• Graduates will have developed a level of critical thinking and problem solving skills in the areas of aviation safety and pilot performance

Program Structure
Students must complete 48 units of credit (UOC) comprised of the following compulsory courses:
24 Units of Credit of Training Courses (compulsory)
• AVIF5915 Airline Pilot Multi-Crew Coordination (12 UoC)
• AVIF5916 Aeroplane Systems for Airline Pilots (12 UoC)
Students must also choose 24 Units of Credit of Graduate Level Aviation Courses as electives, to be chosen from

- AVIA5015 Safety Management Systems (6 UoC)
- AVIA5018 Aviation Human Factors (6 UoC)
- AVIA5022 Accident Investigation Techniques (6 UoC)
- AVIA5024 Flight Deck Operations for Advanced Transport Aircraft (6 UoC)
- AVIA5039 Airworthiness for Transport Category Aircraft (6 UoC)

AVIF5915 and AVIF5916 will be offered in both sessions and require attendance on campus. The four 6 UoC courses are undertaken by distance, and may be taken with part-time program enrolment.

**Sample Programs**

Program flexibility with regard to the course offerings is important, as many students will be working once the core courses AVIF5915 and AVIF5916 are completed. Two sample programs are listed below as examples. Contact the School Office for other program arrangements, as sessional offerings for AVIA courses may change from year to year.

**Full time**
(a) Year 1: S1 (AVIF5915, AVIA5015, AVIA5039), S2 (AVIF5916, AVIA5018, AVIA5024)
(b) Year 1: S1 (AVIF5915, AVIF5916), S2 (AVIA5015, AVIA5024) Year 2: S1 (AVIA5022, AVIA5039)
(c) Year 1: S2 (AVIF5915, AVIA5015, AVIA5039) Year 2: S1 (AVIF5916), S2 (AVIA5018, AVIA5022)

**Part time**
(a) Year 1: S1 (AVIF5915, AVIA5015, AVIA5039), S2 (AVIF5916, AVIA5018, AVIA5024)
(b) Year 1: S1 (AVIF5915, AVIF5916), S2 (AVIA5015, AVIA5024) Year 2: S1 (AVIA5022, AVIA5039)
(c) Year 1: S2 (AVIF5915, AVIA5015, AVIA5039) Year 2: S1 (AVIF5916), S2 (AVIA5018, AVIA5022)

**Fees**

For information regarding fees for UNSW programs, please refer to the following website:
http://student.unsw.edu.au/fees

**Advanced Standing**

Applicants who have completed the following cognate degrees will be given 12 UoC advanced standing toward the 24 UoC of required AVIA courses.

- Bachelor of Aviation (Management or Flying)
- Bachelor of Engineering (Aeronautical or Aerospace)

**Admission Requirements**

To gain entry to this program, students must

1. Hold a Commercial Pilot Licence and an Instrument Rating Multi-Engine Aeroplane and;
2. Be an Australian citizen or Permanent Resident, and
3. Attend an interview with Head, School of Aviation or nominee to ascertain suitability with regards to motivation and background, and
4. Satisfactorily Perform an Aptitude Test
How to Apply

1. Submit an admission application online at www.apply.unsw.edu.au. Summer applications close 15 October. S1 applications close 31 January. S2 applications close 15 June. Online application fee is $100.
2. Provide your CV to UNSW Admissions.
3. Contact School of Aviation for an Interview Application for the GradDip Adv Flying.
4. School of Aviation will contact you for an interview and an aptitude test.

Further articulation into the Master of Aviation Management (Program 8741)

Students completing the Graduate Diploma in Advanced Flying will be granted 48 UoC toward the Master of Aviation Management (MAvMgmt) Program 8741, and will then need to undertake another 48 UoC to be awarded the Masters degree. Note: the program will be available to Local students only. Courses AVIA5015, AVIA5018, AVIA5022, AVIA5024 and AVIA5039 are offered in distance mode. AVIF5915 and AVIF5916 require attendance in Sydney.

Program Arrangements

a) UNSW Bachelor of Aviation (Flying) students. From 2015, existing BAv (Flying) students will be able to undertake the instruction and training of AVIF5915 within the auspices of module options within course AVIA3014, which is of 24 UoC. As with other existing options of AVIA3014, additional fees will be charged. Those students who have completed AVIA3014 (including all the content of AVIF5915) will need to undertake AVIF5916 either as a non-award course, in which case fees will need to be paid up-front, or as part of this new Graduate Diploma in Advanced Flying, in which case fees may be paid up front or Fee-Help will become available (for Australian students).

b) New Students having Commercial Pilot Licence and Command Instrument Rating (Multi-Engine). These students will be able to enter this new Graduate Diploma of Advanced Flying. The full 48 UoC will need to be undertaken, unless they have a cognate degree [Bachelor of Aviation (Flying or Management) from UNSW or other universities, or Bachelor of Engineering (Aerospace or Aeronautical)] in which case a total maximum of 12 UOC will be given as advanced standing.

Further information from

Mrs Jamie Lim: aviam@unsw.edu.au
Postgraduate Programs Coordinator
School of Aviation
UNSW Australia
CRICOS Code 00098G

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Handbook Entry:

**AVIF5915 Airline Multi-Crew Coordination**

UoC: 12  
EFTSL: 0.25  
Staff Contact: Mr Brian Horton  
Pre-Requisite: Commercial Pilot Licence and Command Instrument Rating – Multi Engine

**Course Description**

The multi-crew coordination course is designed to give the student pilot an understanding of the problems and benefits of flying in a crew environment together with experience in the practical application of the principles of Crew Resource Management (CRM). Classroom lectures and workshops will be integrated with a practical component, which will be conducted in the Multi Crew Flight Training Device (FTD). Prior to the multi crew component, revision and refinement of instrument flying techniques and IFR procedures will be covered using the Frasca DA42 FTD. The practical component will use Standard Operating Procedures, (SOPs) which are based to those used by Regional Airlines, with the objective of introducing students to the procedures that they will be using in line operations. This gives a knowledge and skills base that will underpin the initial training that the student will receive in an airline.

**AVIF5916 Aeroplane Systems for Airline Pilots**

UoC 12  
EFTSL 0.25  
Staff Contact: Mr Brian Horton  
Pre-Requisite: Commercial Pilot Licence and Command Instrument Rating – Multi Engine

**Course Description**

This course prepares students for type rating training in a full flight simulator by providing a comprehensive understanding of the advanced systems and the performance of a modern transport category aeroplane. It consists of the underpinning theoretical knowledge of the systems including airframe, engines, propellers, electrical systems, avionics, auto flight, flight management, ice and rain protection, flight controls, and the practical application of that knowledge, along with performance calculations applicable to the operation of that category of aeroplane.

System operation and management is consolidated with a practical component using simulation to provide the opportunity for the student to apply knowledge in the operational context before moving to the full flight simulator.